Deployment Quarterly

Spring 2002 Vol. 1 Issue 4

U.S. DEPARTMENT OF DEFENSE
Deployment Health Support Directorate

DIRECTOR'S message

Dear Readers:

Six months ago, the world was still dealing with the shock and disbelief caused by attacks on our nation. Many of you or your loved ones were actively involved in the immediate response. It is a time etched in our minds and carved in our history.

Today, Operation Enduring Freedom has focused attention on the soldiers, sailors, airmen, Marines and Coast Guardsmen traveling in harm's way. President Bush, the Congress, the departments of Defense and Veterans Affairs, the media and the public recognize just how important it is to protect the health of those who serve.

Force health protection — promoting and sustaining a fit and healthy force, casualty prevention, and sustaining a world-class casualty care and management system — has changed the nature of medical operations on the battlefield and the actions that follow deployment.

This issue highlights some the principles of force health protection. In particular, we look at environmental surveillance efforts and the new Post-Deployment Clinical Practice Guidelines. The guidelines, implemented in March, immediately focus health care on deployment-related health concerns and determine when physical examinations may be needed because of unexplained symptoms before and after deployments.

We will continue to bring you information on DoD-VA cooperation to assist veterans, progress being made in documenting all health care and immunizations in an electronic format, and reports from veterans who have experienced the new focus on force health protection.

May 18th is Armed Forces Day and will be celebrated on installations throughout the country. We hope you'll be able to participate and see first-hand what America's sons and daughters do every day. We also wish the U.S. Army a happy birthday — 227 years of service on June 14th.

Finally, we'd like to thank you for your unwavering support of those who serve. An Army master sergeant recently said, "Of all the years I've been in the military, I've never had people just walk up to me and thank me for what we're doing. People just walk up to me in the store and say thanks! Because of all that, I'm proud. I don't know any other way to say it: I'm proud."

We hope you find this issue of *Deployment Quarterly* useful. If you have any questions, please call us Monday through Friday, from 9 a.m. to 9 p.m., at (800) 497-6261. We may also be reached on-line, at *special.assistant@deploymenthealth.osd.mil* or by mail. We would like to hear from you.

Sincerely,

Michael E. Kilpatrick, M.D.

Deployment Quarterly

The Deployment Health Support Directorate

Volume 1 Issue 4

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Deployment Quarterly is published quarterly by the Deployment Health Support Directorate Public Affairs Office, 5113 Leesburg Pike, Suite 901, Falls Church, Virginia 22041. Send address changes to the same address.

SUBMISSIONS: Print and visual submissions of general interest to active duty, Reserve Component members, veterans and families are invited. Please send articles with name, phone number, e-mail and complete mailing address and comments to:

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The editor reserves the right to edit all manuscripts for readability and good taste.

LETTERS: Letters to the editor must be signed and include the writer's full name, city and state (or city and country) and mailing address. Letters should be brief and are subject to editing.

AUTHORIZATION: *Deployment Quarterly* is an authorized publication for past and present members of the Department of Defense. Contents of *Deployment Quarterly* are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Deployment Health Support Directorate.

spring 2002

U.S. Army troops headed for Afghanistan board "Herky 130" at Aviano Air Base, Italy. The cargo plane's crew, from the 37th Airlift Squadron, Ramstein Air Base, Germany, flies channel missions throughout Europe.

Photo by Master Sgt. Keith Reed

Features

Keeping servicemembers healthy. See Page 10.

On the Cover

Staff Sgt. Joseph Uekusa, 376th Air Expeditionary Wing Security Forces Squadron, stands guard by a C-17 Globemaster III aircraft while it gets refueled Feb. 18. This was the first aircraft refueled at this forward location since the base built up in support of Operation Enduring Freedom.

U.S. Air Force photo by Staff Sgt. James Arrowood

In Every Issue

News from Around the World

AR-PERSCOM Launches New Self-Service Web Portal

WASHINGTON, D.C. — The Army Reserve Personnel Command expanded its scope of "taking e-care of soldiers" by adding a new self-service portal to its official Web site, *http://www.2xCitizen.usar.army.mil*.

The new portal, My2xCitizen, provides Army Reserve soldiers with a snapshot view of their career information and enables them to uniquely customize information most significant to managing their Army Reserve careers. My2xCitizen supports Army Reserve Personnel Command's commitment to develop improved and timely services for Reserve soldiers in the field and to better support Army reservists worldwide.

Army Reservists are also able to volunteer for current operations, such as Enduring Freedom, through the new portal. In addition, AR-PERSCOM has designed My2xCitizen to enable active Army and National Guard soldiers, who have served in the Army Reserve, to view historical retirement and promotion information.

"Our goal is to continually improve personnel readiness in any way that we can," explained U.S. Army Col. Bruce Pittman. "We've taken the next major step toward AR-PERSCOM Knowledge Management by adding My2xCitizen to AR-PERSCOM's 2xCitizen Web site."

My2xCitizen maintains all of the functionality and links previously available on 2xCitizen with additional capabilities that focus on showcasing personalized career information.

According to Anita Washington, portal business team leader, AR-PERSCOM began its quest toward customer self-service with Interactive Voice Response initiatives over this past year.

"The Web portal is the next logical step in this process and represents AR-PERSCOM's commitment to improving customer service," Washington explained.

"The portal enhances AR-PERSCOM's ability to provide information to a large and geographically dispersed Reserve population. Reserve soldiers are able to verify their current contact information (especially important during mobilization operations such as Enduring Freedom), update their address, phone, fax and e-mail information, and obtain information on retirement points," she added.

To access the portal, Reserve soldiers must obtain a valid login and password. Soldiers can then log into the portal directly from the 2xCitizen Web site home page at *https://www.2xCitizen.usar.army.mil*. To register for an Army Knowledge Online account, go to *http://www.us.army.mil*.

Absentee Ballots: Troops' Tickets for Overseas Voting

WASHINGTON, D.C. — Participation in the nation's electoral process "is a mark of good citizenship, and in that respect, I would say our military are certainly fine examples of good citizens," said the Department of Defense's senior voting assistance officer.

"We'd like to see servicemembers

exercise their right to vote to the fullest extent," said Polli Brunelli, director of the Federal Voting Assistance Program in Arlington, Va. The FVAP facilitates absentee voting for U.S. military and other American citizens living overseas, she noted.

Servicemembers, especially those stationed overseas, should contact their local voting assistance officer well before elections to obtain the required information and materials needed to register and vote, she said.

"Send those materials in promptly to your local election official — that's the county where you're eligible to vote," Brunelli said.

The FVAP carries out the voting program on behalf of the secretary of defense, who is delegated by the president to administer the Uniformed and Overseas Citizens Absentee Voting Act of 1986, she noted. The law affects more than six million potential voters.

The program's aims are to inform and educate U.S. citizens worldwide of their right to vote; foster voting participation, and protect and enhance the integrity of the voting process at federal, state and local levels.

The Fiscal 2002 National Defense Authorization Act contains several provisions addressing voting assistance programs, Brunelli noted. Some new provisions are:

- Each military service's inspector general will annually review the effectiveness of their service's voting assistance programs and issue a report to the DoD inspector general.
- The services will ensure their voting programs dovetail with Uniformed and Overseas Citizens Absentee Voting Act provisions and DoD directives governing voting assistance programs.
- Commanders will ensure voting assistance officers are appointed, properly trained and equipped to provide military members with information needed to register to vote and to cast absentee ballots.
- Commanders' evaluation reports on voting assistance officers will include comments pertaining to their performance in carrying out their voting assistance responsibilities.

Beginning four months before general elections, the secretary of defense will survey all overseas locations and seagoing vessels and all U.S. port facilities that collect APO and FPO mail to determine if voting materials are awaiting shipment and to ensure the military postal service moves the materials expeditiously.

The absentee voter registration and ballot processes have been simplified.

Servicemembers who want the particulars on how to register and vote should contact their local voting officers, Brunelli said.

She noted that the Fiscal 2002 Defense Authorization Act permits the FVAP to conduct a demonstration project this year allowing service-members to cast absentee votes electronically. A similar project during the 2000 presidential election validated the concept of Internet absentee voting, she said, but it involved fewer than 100 servicemembers from 21 states and 11 countries.

The Fiscal 2002 Authorization Act, she said, "strengthens voting assistance programs of the services and also helps ensure that our men and women in uniform are able to exercise their right to vote."

For more information on the Federal Voting Assistance Program, go to *http://www.fvap.ncr.gov*.

Frequent Flier Miles Can Now Be Kept

SCOTT AIR FORCE BASE, Ill. — The 2002 Defense Authorization Act now allows official travelers to accept promotional items, including frequent flier miles, and use them for personal travel.

According to the new law "any promotional items through official travel belong to the traveler," said Dwight Moore, staff attorney at U.S. Transportation Command and a principal writer of the proposal. He said TRANSCOM recommended the change to Congress.

Mileage received by servicemembers and federal employees before the bill was passed is also "grandfathered," Moore said. People who have accumulated mileage in frequent flyer accounts through official travel over the past years own all of that mileage, he said.

Moore explained that frequent-traveler benefits include points or miles, upgrades, or access to carrier clubs or facilities.

The change in the law was the result a legislative proposal forwarded by U.S. Transportation Command in 1999 as part its yearly package of proposals for consideration by the Department of Defense and Congress, Moore said.

The proposal went to all federal agencies for coordination and comment and eventually was sponsored by legislators.

One stipulation in the law is that government travelers cannot accept special

promotional items that are not available to the general public.

"The promotional material must be obtained under the same terms as those offered to the general public and must be at no additional government cost," according to implementing instructions from the Per Diem, Travel And Transportation Allowance Committee, a Department of Defense activity.

Local travel offices can provide more information on the new law, Moore said.

Scams Target Veterans for Identity Theft

WASHINGTON, D.C. — An e-mail circulating about a retiree who had his identity stolen after filing separation papers at a county courthouse is no urban legend, according to Transition Center officials.

Servicemembers separating from the military are now being advised to ignore the old recommendation to file their Department of Defense Form 214 (Military Discharge) with their local county courthouse. Instead, transition counselors are advising servicemembers to safeguard their personal information to guard against credit fraud, said Deborah Snider, Transition Center personnel analyst at the U.S. Total Army Personnel Command.

Between 600,000 and 700,000 cases of identity theft were reported by the Federal Trade Commission in 2000. Identity theft is the fastest growing crime today, according to the FTC, and many victims don't find out that their personal information has been stolen until they are trying to buy a house or get a loan.

"I don't think anyone ever thought about this happening, which is the reason there are no provisions to 'unfile' records," Snider said. "This is a serious problem, and service-members are a prime target because everything is tied to their Social Security number."

The victims of identity theft suffer tremendously because the burden of proof is on them, Snider said. It's hard to believe that a person's life could be destroyed by this, she said, but it happens.

A Navy retiree learned that someone had stolen his personal information and established credit in his name when he received a phone call from a clerk at American Express saying that someone was trying to cash a $9,000 check in his name made out to a Middle Eastern-sounding name.

The clerk was suspicious and called the retiree because the address she had on file for him did not match the address on the check. After the retiree's case was investigated, he found out that a lawyer had stolen his identity. The lawyer also had a laptop with several thousand military names, Social Security numbers and other information on it. The common link between the veterans on the list was that they had filed their DD 214s with their county courthouse.

"Someone stole my identity, now I feel I am no longer me," said a victim of identity theft. "I reside in the pocket of a felon who can see that she is allowed to steal me without penalty. She carries me casually, and each time she pulls me out a small piece of me falls away."

To help guard against identity theft the Transition Center is no longer placing Social Security numbers on discharge and retirement certificates, Snider said. Anything that might be hung for display will not have a servicemember's Social Security number on it.

When servicemembers separate from active duty, Snider said the most vital document they receive is the DD 214. It contains their Social Security number and birth date. In the past, servicemembers were advised to file the form with their local courthouse to ensure that they would always be able to get a certified copy. They need a certified copy to receive any Veterans Administration benefits.

Once the DD 214 is filed at a local county courthouse, however, it becomes a public record. Some courthouses have put this information online, and even more plan to do so in the future, Snider said.

"Our recommendation is to safeguard the form as you would any vital papers such as a will, marriage license or insurance papers," Snider said. "A safe deposit box would be a good investment."

Forty-six states now have identity theft laws, up from just three in 1996, according to the Federal Trade Commission. And many state lawmakers are considering toughening laws already on the books.

LETTER TO THE editor

Dear Editor,

I just received *Deployment Quarterly*, Vol.1, Issue 3, and have a suggestion. In your Resource Guide, please consider including contact information on the National Committee for Employer Support of the Guard and Reserve (ESGR). As state PAO for the Tennessee Committee, I believe the role of ESGR is very important to Reserve Component soldiers, their families and their civilian employers — especially in this period of increased mobilization. As you undoubtedly know, the state committees are actively involved in promoting a better understanding of the role fulfilled by the National Guard and Reserves in our nation's defense. I believe any effort we can make to ensure that RC soldiers and their employers know and understand their rights and obligations under the law is extremely important.

Thank you,

Ric Sitler
TNESGR PAO

ASK THE doc

Q Should I get a complete physical examination after I return from a deployment ?


Col. Francis O'Donnell, M.D.

A Complete physical examinations are not necessary for most people who are returning from a deployment. At the end of a military deployment, you should fill out a brief questionnaire, called the Post-Deployment Health Assessment (DD Form 2796), that asks about possible health problems or concerns. If your answers indicate a possible problem, then you should be referred for more thorough medical evaluation.

When you see the doctor for that more thorough check, the specific nature of your symptoms or concerns will determine what kind of examination should be done. For example, if only an earache troubles you, the examination should initially concentrate on your ear and other parts of your head and neck. A thorough examination of your entire body is not likely to be necessary. As another example, if you have pains in your knees, the examination should focus on those joints. A careful examination of your ears is not necessary and may be a waste of time for both you and the doctor. On the other hand, if you feel sick in a general way that doesn't seem related to a particular organ or part of your body, then a more thorough examination of your whole body may be necessary.

This approach to people returning from a deployment is based on the overall effort to sustain a fit and healthy military force. You had to undergo complete physical examinations and had to be found healthy just to get into the military. You also have to be examined periodically if you stay in the military. In between scheduled physical examinations, you have had free medical care from a system which exists mainly to preserve and restore the health of those in uniform. Military personnel are encouraged to seek medical care whenever they have symptoms of illness or injury. The goal is to make sure that all health problems are taken care of so that the military can field a healthy force on deployments.

To ensure that you are healthy as you deploy, you should fill out a brief questionnaire, called the Pre-Deployment Health Assessment (DD Form 2795), that asks about possible health problems or concerns. If your answers indicate a possible problem, then you should be referred for more thorough medical evaluation. As a result, we can take care of minor problems that might worsen during deployment, or we could decide that you really shouldn't deploy for medical reasons.

If you've deployed in a healthy state, an important military goal is to preserve your health while you're deployed. Doing that involves lots of different steps to protect you from threats to your health, such as unhealthy food and water, extremes of heat and cold, insects that carry disease, and accidental injuries. If you do get sick while deployed, then first-class medical care should be available to restore your health or arrange for safe evacuation.

If you were healthy when you deployed and you were protected from disease and injury during the deployment, then, when you come home, medical care should focus on those things that are new. A complete physical examination usually is not necessary to take care of a new problem. ■

DRUGS & herbs

I have been taking several nutritional supplements for several months to add muscle and reduce fat. I want to continue my training and nutrition regimen, but I am about to deploy for six months. What should I be concerned about?


Cmdr. Gene DeLara, MSC, USN

The answer may be longer than you expected, but there are some important issues surrounding your question. I am not aware of any guidance that would prohibit you from taking a non-prescription nutritional supplement; however, the regional commander for the area where you are deploying sets the policy for all matters. Check with your unit's medical personnel for specific guidance.

Assuming there is no prohibition, there are various issues you should be concerned about. First, you should fully understand the various contents and what they are supposed to do or provide. Some experts indicate three out of four Americans take some type of nutritional supplement, yet few know or understand what they are actually ingesting. Some manufacturers are reputable, and the products they produce are consistently

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Preparing Today for the Environmental Threats of Tomorrow

by joan kennedy

Military preventive medicine has traditionally focused on preventing and controlling diseases and injuries. Experts have known for years that disease and non-battle injuries cause more lost manpower than battle casualties.

In the Civil War, the last large-scale conflict fought with little knowledge of the microbe-illness connection, many of the soldiers who died were killed by uncontrolled infectious diseases. Epidemics played a major role in several major Civil War campaigns and may have prolonged the fighting. Preventive medical efforts since that time have included immunization, water sanitation, waste management, prevention of injury from heat or cold, sanitation of food and dining facilities, and pest control. Since the Gulf War, the Department of Defense has recognized the need to reduce the impact of a broader range of potentially hazardous environmental exposures.

To support this effort, a working group was formed in 1998, representing preventive medicine specialists from all the armed services. This group, the Joint Environmental Surveillance Working Group, reports to the Joint Preventive Medicine Policy Group. The Joint Preventive Medicine Policy Group in turn reports to the source of its own charter, the assistant secretary of defense for health affairs.

The Joint Environmental Surveillance Working Group is developing a detailed blueprint for short- and long-term improvement in DoD's ability to recognize and deal with the types of environmental health risks facing servicemembers of today and into the future, in a way that promotes consistent policies and shared resources across service lines.

John Resta, who chairs the JESWG, is a program manager and long-time employee at the U.S. Army's Center for Health Promotion and Preventive Medicine, headquartered at Aberdeen Proving Ground, Md. Resta's team, the Deployment Environmental Surveillance Program, works to document what exposures occur so military doctors can determine if servicemembers are at increased health risk and, if so, what kind of medical follow-up they would require.

The JESWG, says Resta, is working to get this type of activity institutionalized throughout the military.

Resta says environmental surveillance will work better if all the services use uniform procedures and take samples with the same methods, standards and equipment and if each service — in a significant cultural change from traditional military practices — makes its facilities available for use by the other services.

"The working group, which includes the Army, Navy and Air Force intelligence communities and joint staff, will come up with the necessary policy, guidance, procedures and equipment to make this a normal way of doing business," said Resta.

"If an Army team takes a soil sample in Southwest Asia, it just makes a lot more sense to use a Navy facility in Asia than to send that sample all the way back to Maryland for testing," he says.

The JESWG's long-term goals are described in its Occupational and Environmental Health Surveillance Concept of Operations. In this document the JESWG vision for long-term growth describes the need to develop field capabilities that are faster, lighter, smaller, and much more practical for battlefield use.

A single, shared repository is envisioned for access by all the services and the Department of Veterans Affairs of extensive occupational and environmental health surveillance information. And in a leap significantly ahead of current capabilities, the report recommends development of the ability to identify potential hazardous exposures on an individual basis, instead of relying on the same data to estimate exposure for an entire group. In the report, the JESWG recommends improved training in preventive medicine and environmental health surveillance.

"Common training will be particularly important for the ability to support joint and multinational operations," the paper notes.

The Joint Environmental Surveillance Working Group's goal for DoD is the eventual capability to access and query computer systems for hazard exposure data, unit locations, and movement information. It recommends that environmental monitoring, biomarkers, troop location and activity databases be linked with one another, with individual medical records, and with such non-Defense Department databases as the VA. It should include environmental and occupational exposure data, personnel data, intervention data such as immunizations, for example, and health outcome data.

Recommending that DoD develop specific technical capabilities that may not be ready for several years, the Joint Environmental Surveillance Working Group is working today to mitigate the effects of environmental hazards faced by tomorrow's servicemembers.

For more information about the Deployment Environmental Surveillance Program, visit its Web site at *http://chppm-www.apgea.army.mil/desp/pages/samp_doc.htm*

Spc. John Walker (left), 2nd. Lt. Dennis Knowles and Cpl. William Saphara (right) of the 127th Armor, New York Army National Guard deployed to ground zero days after the Sept. 11th terrorist attack.

Extraordinary Heroes

Guardmember Tells Tale of Service to Country During One of Its Darkest Hours

by melissa burslie

On Sept. 11, when most Americans were rushing home to be with their families, Cpl. William Saphara was packing up his gear and preparing to go to ground zero. As a member of Company D, 1st Battalion, 127th Armor of the New York Army National Guard, Saphara had been called up twice before, but never for an event like this.

"I assumed my unit would be called up. I contacted my wife and called my mom to say I was OK," said Saphara, 31, as he was preparing to be sent to the front lines of America's domestic war on terrorism. Saphara lives in Auburn, N.Y., with Liz, his wife of two years. In addition to him, 67 other members of his unit were making preparations to deploy.

The call came in the early afternoon. His company was told to report to the armory as soon as possible. Although Company D was not told what their mission would be, the soldiers were eager to help in any way possible. The newer Guardsmen were especially "amped up and rarin' to go, the more experienced soldiers were more reserved," explained Saphara. Later that night, their status was downgraded from full mobilization to standby, and they were allowed to return home.

The Guardsmen finally deployed to ground zero on Sept. 21, 2001. Arriving in New York City, Saphara and the rest of his unit were taken aback by what they saw.

In the aftermath of what was once the World Trade Center, now stood a pile of twisted steel beams, crushed concrete and other materials. Dust and soot covered the sidewalks, trees and cars.

"It didn't look real. It looked like something out of a movie," Saphara said. "I was kind of numb the first day or so."

Emergency rescue workers and officials already at the World Trade Center informed Saphara they were there to provide security in and around what was left of the World Trade Center. Drawing from his civilian career experience as a juvenile corrections officer for the state of New York, Saphara provided some additional training to the soldiers in his company. Normally Company D is involved with armor training and exercises, so he taught the unit how to frisk people and provided some basic training on how to deal with physical or belligerent people.

The Guardsmen's presence provided support and relief for law enforcement officers stationed around the attack site. They took the overnight shift, working 13 hours a day and sometimes more.

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"The police department appreciated that we were there. It gave them the opportunity to take a break and be back with their families," continued Saphara who said that many Guard members wanted to do more.

When they were off duty, the men of Company D stayed at different locations. The first couple of days they stayed on the U.S. Navy's hospital ship, the USNS Comfort. After Comfort left New York, the company was moved to Governor's Island and took the ferry to work.

Saphara has been a member of the National Guard for 14 years. He feels his experience has helped when called up for deployment.

"I could stay focused. Other people were watching the news, I was packing my gear," he said.

The big difference with this activation was the nature of the mission.

"We were activated before for a tornado and an ice storm. This time we wondered if it would go from a state mission to a federal mission or maybe overseas," Saphara says.

His unit did not get sent overseas. Instead, the unit returned home a little over two weeks later. The experience in New York City will never leave Saphara.

"You realize things that are important to you," he said. "The family thing is really number one."

When he thinks about the future now, Saphara is even more certain of his decision to stay with the National Guard. He hopes to stay in as long as he can.

Saphara is proud to be serving his country and believes the National Guard is getting more of the respect it deserves.

"We were the first ones on the scene. The first fighter planes were Air National Guard and we were the first offering assistance."

Saphara also thinks their mission will refocus.

"For a while we got away from the civil disturbance mission, but now I think we'll see more of it," he said.

For now, Saphara and the members of Company D are prepared for whatever they are called up for again. Whether it is to provide aid during difficult weather or provide assistance during even more difficult times, their training and sense of duty keep them focused and ready to serve.

In the months since the Sept. 11 terrorist attacks on the World Trade Center and the Pentagon, some 75,356 National Guard and Reserve members have been called to active duty from 50 states, the District of Columbia and Puerto Rico.

For Saphara and so many others like him, the experience of being at ground zero has made an impact on his life. Although he already has a bachelor's degree, Saphara has enrolled in a local community college to study nursing. He continues to be an example of the dedication and commitment regularly demonstrated by the many men and women who volunteer to serve their country.

For more information about the National Guard, visit its Web site at *http://www.ngb.dtic.mil/* or call 1-800-Go-Guard.

Drugs & Herbs

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of high quality, while others are suspect. Dietary supplements are not subject to FDA approval prior to marketing. You, the consumer, are responsible for your health. Since the FDA does not strictly regulate supplements, manufacturers are not required to test for side effects, drug interactions, efficacy or consistency. You should find out if the ingredients in your supplement have any reported side effects or drug interactions. Some people are allergic to milk protein, which is a major component of many muscle building supplements. Some supplements can actually mimic the effects of some drugs. If you were to pass out or become dehydrated because of some unexpected side effect, not only would you embarrass yourself, you could endanger your life.

Stores carrying dietary supplements are frequently found on military bases and installations. Because of this and the fact that supplements contain natural substances, many people assume these products are inherently safe. However, supplements may contain vitamins, minerals, proteins, herbs, botanicals, amino acids and pharmaceutical synthetics. All of these can have a profound effect on your body.

That's a mouthful, but here is a recap:

- know the policy
- know the ingredients
- know any side effects or interactions
- understand you are responsible for your own health.

Cmdr. Gene DeLara, Medical Service Corps, U.S. Navy, serves as the medical planner in the Directorate for Deployment Health Support. He has a Doctorate of Pharmacy degree and a Masters of Business Administration degree. DeLara is both a pharmacist and medical planner holding the 1805 Plans, Operations, and Medical Intelligence specialty code.

Coming Soon to Your Internet – MedSearch

MedSearch — a new library of Gulf War-related research projects — will soon be added to the Defense Department's Web site, GulfLINK. The new section was developed in response to a need expressed by scientists, clinicians, veterans, and veterans' service organizations.

In 1999, the Centers for Disease Control and Prevention hosted a conference entitled "The Health Impact of Chemical Exposures During the Gulf War: A Research Planning Conference." The purpose of the conference was to meet with those interested in Gulf War health issues and to recommend how best to pursue future research.

"One of the recommendations called for the establishment of a centralized research library and data repository that would collect research proposals and results and maintain them in a format that would be easily accessible and searchable electronically," says Michael E. Kilpatrick, M.D., director, deployment health support

Staff from the CDC consulted with representatives from the departments of Defense and Veterans Affairs and the Military and Veterans Health Coordinating Board regarding this recommendation. In May 2001, the CDC provided one-year funding to the Deployment Health Support Directorate to develop the site.

The directorate was chosen for this project, Kilpatrick, says because of its expertise in developing and implementing military and veteran-targeted Web sites such as GulfLINK (*http://www.gulflink.osd.mil*) and DeploymentLINK (*http://deploymentlink.osd.mil*). For example, GulfLINK was launched in 1995 and today continues to receive approximately 150,000 "hits" each week.

The deployment health office staff employed a medical researcher and a librarian to identify, collect and catalog the government-sponsored research on Gulf War-related health issues. Representatives from the CDC, VA and DoD approved the format for the web site on Nov. 2, 2001. Since then, the staff has added hundreds of research projects to the database.

The site will serve as a valuable tool for veterans, researchers, health care providers, and the general public, Barbara A. Goodno, deputy for public affairs and outreach, says. As a one-of-a-kind site, MedSearch will contain a compilation of all government-sponsored research on the health effects associated with deployments during the Gulf War. The site will also facilitate access to the centralized library via the Internet.

Currently, the staff is working with small focus groups to gain feedback. The information provided by Gulf War veterans, researchers and family members will be used to improve the site before it's formally launched, Goodno says. Following the focus group feedback, the site will go live early this spring. ■

VA Creates Gulf War Advisory Committee

Secretary of Veterans Affairs Anthony J. Principi announced in January a new advisory committee that will help the Department of Veterans Affairs oversee its research into the medical problems of Gulf War veterans.

"Gulf War veterans have waited too long for answers to many of their questions," Principi said. "This committee, composed of medical experts and veterans, will focus on the research that we hope will improve the health of ill Gulf War veterans."

The 12-member Research Advisory Committee on Gulf War Veterans' Illnesses was established by Congress to advise the VA secretary on proposed research studies.

The panel must submit an annual report on the status and results of government research during the previous year and on research priorities identified by the committee.

The group's charter, established by Section 104 of Public Law 105-368, which was signed Nov. 11, 1998, says the panel shall "provide advice and make recommendations to the secretary of veterans affairs on proposed research studies, research

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Keeping Watch Over the Health of Servicemembers

by austin camacho

One of the most important lessons learned from the Gulf War is that post-deployment health concerns present unique challenges and require special attention. The Department of Defense is responding to this need with a new clinical practice guideline that was implemented Feb. 1.

Clinical practice guidelines are a form of instruction book for physicians. There are many clinical practice guidelines in use throughout the medical community, including those used by the American Association of Clinical Endocrinologists and the American Diabetes Association. The new Post-Deployment Health Evaluation and Management Clinical Practice Guideline is designed to assist health care providers in screening and evaluating servicemembers with health concerns following deployment. Developed jointly with the military services, the Department of Veterans Affairs, civilian experts and veterans, the new guideline offers a structured way of giving care to people after deployments, according to U.S. Army Lt. Col. Charles Engel, M.D., M.P.H.

"This guideline is going to serve as a way to generalize a model of care that we've been promoting for Gulf War veterans and people with health concerns after various military deployment exposures," Engel says. He has a good deal of experience with the veterans of deployments. In 1995, he helped start the Gulf War Health Center, a treatment program for people with medically unexplained symptoms, at Walter Reed Army Medical Center in Washington, D.C. At that time, the center was a referral center for Comprehensive Clinical Evaluation Program clinics.

The Comprehensive Clinical Evaluation Program was created to address the evaluation and treatment needs of Gulf War veterans who were still in the military, as well as retirees, and those who were active in the National Guard or Reserves. Comprehensive Clinical Evaluation Program patients who could not be diagnosed went to the center. The Gulf War Health Center has become the Deployment Health Clinical Center, and today Engel is its director. He says that a very large proportion of the people going through the center are Gulf War veterans, but now they also have people coming in with health concerns from other deployments as well. Engel says the new clinical practice guideline represents an effort to apply lessons learned from the

U.S. Air Force photo by Tech. Sgt. Robert J. Horstman

Airmen from Barksdale Air Force Base, La., return home from a forward Operation Enduring Freedom location while a 2nd Bomb Wing security team keeps watch.

U.S. Air Force photo by Staff Sgt. Greg L. Davis

A patient is moved toward a waiting ambulance after being unloaded from an Army OH-58A Kiowa Warrior helicopter during a training evacuation exercise.

CCEP, and transition from a program that serves only Gulf War veterans to one that serves all people with deployment health concerns.

"That includes people in some cases who haven't been deployed," Engel says. "Family members, coworkers, even people who cleaned equipment after various exposures of uncertain magnitude, they need care as well. Health concerns befall lots of people whether or not they deployed."

Historically, military medical care has focused on taking care of servicemembers up to a deployment, then providing good care in the field. There was little emphasis on post-deployment health care. But as Engel observes, developments after the Gulf War have dictated a fundamental change in direction. He says the Post-Deployment Health Evaluation and Management Clinical Practice Guideline is a continuation of that fundamental shift.

"Treating people with medically unexplained symptoms pointed out a lack of understanding in the medical system of the various exposures that are possible," Engel says. "Let's face it, the places the military is asked to go are often hazardous places. They're not OSHA approved."

One of the lessons learned from the Comprehensive Clinical Evaluation Program was the effectiveness of a stepped care approach for post-deployment health evaluation and care. The Comprehensive Clinical Evaluation Program offered three phases of evaluation, based on the patient's needs, and the new clinical practice guidline echoes that approach.

"The overall objective," Engel says, "is to provide a continuum of care within the military that starts before a deployment and provides various levels of care all the way up to specialized programs."

When fully implemented, the care plan will begin with prevention, risk education and medical tracking. Post-deployment screenings will determine if the person needs further evaluation or treatment in a primary care setting.

"This guideline represents an emphasis on primary care," Engel says, "where the lion's share of people are receiving care."

Chronic health problems would trigger what Engel calls "collaborative primary care," an integrated, multi-disciplinary approach, which would include care-based education. People with medical problems reaching the level of disability would enter one of the Deployment Health Clinical Center's intensive programs, some of which are inpatient programs working with the group of medical experts who until recently have worked almost exclusively with ill Gulf War veterans.

"One consequence of doing business within the CCEP has been that we've had this small cadre of expertise that very few clinicians knew about," Engel says. He sees the Post-Deployment Health Evaluation and Management Clinical Practice Guideline as part of the cure for that problem. When in use, it will direct all military doctors to channel people with deployment-related illnesses that are hard to diagnose to those experts.

That also gives the Deployment Health Clinical Center an incentive to bring some effort to the implementation of the Post-Deployment Health Evaluation and Management Clinical Practice Guideline. The center's efforts make this clinical practice guideline unique among the many in use throughout military medicine.

"Our center is charged with intensifying efforts around the health care system to implement the guidelines. They're the only guideline that the DoD and VA have created so far that will have a center to support its implementation."

Perhaps the most significant difference between the new clinical practice guideline and others in use is what Engel calls a military unique "vital sign." In addition to checking pulse and temperature, the new clinical practice guideline calls on military doctors to ask each patient this question: "Is the issue causing you to seek care today related to a deployment?" If the answer is yes, the doctor will then follow the new guideline leading him on the best path for treating that patient.

The new clinical practice guideline also goes beyond the single visit to a medical facility. There is guidance built in for follow-up visits, which Engel says is an improvement on the standards established by the Comprehensive Clinical Evaluation Program.

"The CCEP was a one-time evaluation, and there was often criticism over that," Engel says.

Along with the new clinical practice guideline, DoD is using a new International Classification of Diseases code for deployment-related health concerns. International Classification of Diseases codes are standard classifications the medical community uses to identify specific diagnoses. DoD uses those codes to monitor health data of everyone in the military and their family members. That information is sent to a

— *Continued on Page 12*

research

Radio Waves Peer into Luggage to Find Contraband

Explosives or narcotics concealed in luggage, mailboxes or on a person can't hide from low frequency radio wave pulses which swiftly and safely detect the presence of the offending substance.

Based on technology developed by researchers at the Naval Research Laboratory in Washington, D.C., with support from the Federal Aviation Administration, the Technical Support Working Group of the Department of Defense, and the Office of Naval Research, luggage detection equipment is being tested in airports in the U.S. under an NRL license to Quantum Magnetics, Inc., of San Diego, Calif.

The technique used to zero in on explosives and narcotics is a process called nuclear quadrupole resonance, or NQR.

To find the target materials, low-frequency radio wave pulses are emitted, which momentarily disturbs the alignment of certain nuclei within the material. The pulsing causes the nuclei to realign and send out a unique weak radio signal. A sensor coil, patented by Naval Research Laboratory, then hears this signal, which a computer analyzes to determine the presence and type of material found.

Nuclear quadrupole resonance is especially effective for land mine detection because today's plastic-encased land mines have tiny metal firing mechanisms that require extremely sensitive metal detectors that also hone in on shell casings, nails and wire — leading to more false alarms than actual mines. With nuclear quadrupole resonance, the explosives, the very essence of the mine, are being detected. ■

Deployment

— *Continued from Page 11*

coordinating center within the U.S. Army's Center for Health Promotion and Preventive Medicine. Using this new code will help military doctors find out if certain specific medical problems appear more often in people who took part in a particular deployment.

"All visits that occur under this guideline not only get that diagnostic ICD code," Engel says. "But researchers will be able to call up all visits related to deployments to see what diagnoses are associated with them and be able to track longitudinally the health of these folks."

The post-deployment health guideline has been posted on the Internet for several months to give both physicians and veterans a chance to comment. Pilot programs have also been run at McGuire Air Force Base, N. J., and at Camp Lejune and Fort Bragg in North Carolina. At those installations, when patients were asked if the issue causing them to seek medical care was related to a deployment, less than 2 percent of them said yes. Engel says the fact that so few believe their health problems to be deployment related is very good news. Also, if it stays a relatively small segment of the population, military doctors will be able to bring specialized care to that 1 percent or 2 percent.

Those with chronic unexplained symptoms will be referred to the Deployment Health Clinical Center. Engel says his center's clinic will take patients referred from all military medical facilities, as the guideline becomes a standard examination tool used by all military doctors.

"There are good rehabilitative types of treatments," Engel says. "They're not curative, but treatments that help one live a better overall life. There are those sorts of treatments out there that we know work for people even when symptoms are unexplained."

Engel stresses that getting the best care to veterans of military deployments is the ultimate purpose of the new clinical practice guideline on post-deployment evaluation and treatment.

"Doctors in civilian practice do encounter people with chronic, undiagnosed symptoms," Engel says. "But it's even more of an issue after deployment when people become disabled by persistent pain problems and other symptoms. In our health care system we can say these are people who served their country and made important sacrifices. We owe them something." ■

Move Over Smoke Detectors, Anthrax Detectors Are Coming

A researcher working under an Office of Naval Research grant is just a couple of months away from completing a prototype detector designed to sound the alarm when airborne microbes such as anthrax are in the air.

Jeanne Small, a biophysicist and professor of chemistry and biochemistry at Eastern Washington University in Cheney, Wash., has come up with a detector that continuously samples the air, offering analysis in under a half-hour.

"Our research showed that common substances such as road dust and soot behaved differently than bacteria," Small said.

Small has successfully tested biological particles ranging in size from 1 to 10 microns by using lasers and acoustic sensors to detect and identify microbes. In the research, laser pulses were used to excite light-absorbing substances that release energy as heat. Heat-induced solvent expansion generated sound waves, which were measured by an ultrasonic transducer.

Working with Small is InnovaTek, a Richland, Wash., company that makes the air sampler, and Quantum Northwest in Spokane, Wash., is building the sensor component. ■

Easing the Burden for Teens Transferring High Schools

by diana berardocco

Educational and military leaders, working in a spirit of shared determination, are forging agreements that address the transition challenges military-connected high school students confront when they transfer from school to school during their high school years. The Military Child Education Coalition's Memorandum of Agreement — an outgrowth of the Army-sponsored Secondary Education Transition Study — was first adopted by the nine school systems involved in a 1999 Army study. With support from the Military Child Education Coalition, a non-profit organization focused on the academic and school-related needs of the military-connected child, 59 school systems worldwide have now signed the document and are working to lessen the adverse impact of school transition for mobile youngsters.

"It's a declaration of commitment to do something about the issues," said retired U.S. Army Lt. Gen. Pete Taylor, coalition chairman. "Anything we do for military kids in the area of transition affects all mobile kids."

In the spring of 1999, nine schools and installations — seven in the United States, one in Korea and one in Germany — participated in research to examine transitioning children's educational concerns. Installation commanders, school boards, superintendents and field researchers gathered the data worldwide. Based on interviews with hundreds of military-connected students, parents and the staffs of 39 high schools in the nine school systems, the study confirmed that military and mobile children, thrust into repeatedly new settings during their high school years, can experience setbacks that affect future achievement.

"The research verified what we felt the problems were," said Ray McMullen, Ph.D., superintendent of the Fort Campbell school district in Kentucky and one of the super-intendents involved in the study.

According to the Army study, the average military-connected student transitions more than two times during the high school years. McMullen, whose district loses approximately 35 percent of its students each year due to transfers, said one of the difficulties high school students have when they move to another school district is the timely transfer of records. Record transfer becomes most problematic, he emphasized, when students transition in the middle of the year, walk into a new school without records, and have trouble being placed in advanced classes similar to those in their former school.

The research also showed that the transitioning student's adjustment during the first two weeks in a new school environment was critical and an indicator of whether the year ahead would be successful. McMullen recounted that students told him if they didn't make friends immediately in a new school, they would buy their lunch and eat it walking the halls because they didn't have someone they knew to sit with in the cafeteria.

"The magnitude of the problem was not revealed until we did the research," McMullen added.

Taylor explained that military and mobile children often feel they don't have a level playing field when they move to a new school. The transfer of records, exit testing, mandated state history courses and disparate interpretations of academic credits, all add to confusion and upheaval for students and parents alike.

Nearly 59 school systems worldwide have now signed the document and are working to lessen the adverse impact of school transition for mobile youngsters.

"We know of kids who have arrived from overseas to stateside and have had to take an exit exam the day they arrive," Taylor said, noting there are 18 states that require exit exams to graduate from high school and offer no testing reciprocity.

McMullen said that students who move frequently often lose out in the area of extracurricular activities as well. He talked about a talented high school student, a member of the school wrestling team who was being considered for a wrestling scholarship and moved to Georgia during his junior year. When he arrived at the new school, McMullen explained, he was unable to participate in wrestling activities because he had not pre-registered in time.

Experiences like these motivated leaders from the nine research cites involved in the Army study to return to Washington, D.C., in the spring of 2000 to develop a follow-on action plan. Buoyed by the consensus among the superintendents for the need to act, Bill Harrison, Ph.D., superintendent of Cumberland County Schools in North Carolina, urged the group — who represented school systems serving the largest number of Army dependent children — to make a commitment.

"If we could agree to work with one another, to respect the differences we have within our systems, we could

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Students

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come up with an agreement among us and a smooth transition within our nine systems," said Harrison, whose district serves students from Fort Bragg and Pope Air Force Base.

To assist school districts in implementing a course of action, the Military Child Education Coalition has paired a best and promising practices document with the memorandum of agreement that offers signatories an outline of creative ideas to better address student needs.

"The signature on the agreement is a commitment to start working [on the issues],"said Mary Keller, Ph.D., executive director of the Military Child Education Coalition. "We really believe that most problems are solved and most solutions are derived from good partnerships at the local level."

Harrison said signing onto the agreement strengthened the already good relationships the nine school systems had with their respective installations and also created a basis for developing broader relationships.

"Now, our guidance counselors, who deal directly with students' concerns, are empowered to make decisions and 'do what's right for kids,'" he added.

When a child comes into a school without records, McMullen noted, the guidance counselor can immediately e-mail or phone a contact in the other school to resolve the problem.

Harrison also found that being a part of the cooperative pact had a major effect on how state systems interpret course requirements. Difficulties arise when a student has taken a required state history course in one state, moves to another state that requires a state history course, and must relinquish an advanced class to adhere to the new state's requirement.

"We are looking more closely at transcripts in order to find a balance that will not compromise the integrity of any of our programs, but is certainly fair to the youngster," Harrison said.

Building a network of relationships among the superintendents, principals and guidance counselors in other school districts is critical to implementation of the agreement. To facilitate relationship-building, McMullen presided over regional meetings last summer and fall where guidance counselors met with psychologists, and superintendents with principals, to discuss the Memorandum of Agreement process and action plan.

"Networking is one of the keys that makes this happen," he said.

Toni Hill, an active coalition volunteer, and wife of U.S. Army Lt. Gen. James T. Hill, the installation commander at Fort Lewis, Wash., echoes the importance of establishing relationships that foster mutual trust between the military installation and school districts.

"We believe it is the personal interaction we have with local communities that encourages change and greater understanding [of the military lifestyle]," said Hill. She speaks from experience regarding special-needs high school students having successfully transitioned her multi-disabled child through seven states and nine different school districts.

The Fort Lewis Memorandum of Agreement Action Plan includes an array of activities designed to encourage interaction between the installation, the Clover Park School District and other nearby school districts. The popular Army 101 course familiarizes educational staff and faculty in the surrounding school districts with basic information about military culture and lifestyle. The K-12 partnership program assigns commanders to individual Clover Park schools where troops provide weekly assistance to students in areas such as math tutoring, lunch mentoring, and computer-related library or classroom help. The Community Connectors program also places soldier volunteers in the schools where they interface with the school community.

McMullen and Harrison believe improved communication processes are at the essence of improving transition predictability.

All the schools that have signed the memorandum of agreement are focusing on developing Web sites to respond to the basic questions students and their parents have about curriculum, school calendars and extracurricular activities.

"We want the child or parent to be able to enter the school's Web site and learn what subjects are being offered at each high school. The Web site is one of the critical elements [of the agreement]. It has to be information-rich," said Harrison.

To facilitate information exchange with the many students who transfer from Europe to the Fort Campbell schools, McMullen communicates with parents and students before they arrive in the United States through a video conference call that transmits to a number of installations in Europe. To expand the lines of communication, he also invites surrounding school districts to participate.

Both superintendents emphasized the importance of establishing the environment for continuous staff training, meetings with superintendents, principals and guidance counselors, and liaison work with partnering installations, to institutionalize initiatives. The effort gained additional momentum last year when U.S. Army Gen. Eric Shinseki, the Army's Chief of Staff, sent letters to 156 school districts and installations inviting them to sign the memorandum of agreement.

McMullen believes the Memorandum of Agreement has implications for all youngsters throughout the country who move during their high school years. He noted that states, such as California and Florida, deal with problems associated with highly mobile non-military youngsters whose parents move due to work-related demands.

"I see it [the Memorandum of Agreement] as having the potential to literally transform a whole segment of education in this country where youngsters have been falling by the wayside," McMullen said. ■

For More Information

To learn more about the Military Child Education Coalition, you can call (254) 953-1923 or visit its Web site at:

- *http://www.militarychild.org*

For information on military families, you can call the National Military Family Association at (800) 260-0218 or visit its Web site at:

- *http://www.nmfa.org*

Globemasters Last Link of Afghan Airlift

by master sgt. louis a. arana-barradas

On what was a rare quiet day at this busy fighter base, not one C-17 Globemaster III cargo plane was scheduled to make a run into Afghanistan.

There were no aircrews or cargo loaders scurrying about trying to ready the huge C-17s for flights "down range." That, too, was rare. But it would not be long before the planes would be back on the job.

That is because the C-17s, on duty here and at Rhein-Main and Ramstein air bases in Germany since the start of Operation Enduring Freedom, are flying most of the sorties into Afghanistan. Each day, the huge transports ferry troops, supplies and equipment needed to sustain U.N. forces there.

The Afghan airlift is a job tailor-made for the C-17, said U.S. Air Force Maj. Eugene De Paolo, a C-5 Galaxy pilot from Dover Air Force Base, Del., who is attached to Incirlik's 728th Air Mobility Squadron here as a C-17 airlift stage manager. He said the Afghan airlift again proves the C-17's dependability.

"The C-17's the right aircraft for this mission, no doubt about it," De Paolo said. "It's a tremendous platform to get the job done. And they're flying with great reliability."

That equates to more cargo and troops delivered on time to meet the operational needs of U.N. forces on the ground, he said.

The C-17s are not doing the job alone, of course. They are sharing the airlift load with their big brothers, the C-5s. The bigger planes bring cargo and troops from the United States to one of the staging bases. From there, the C-17s fly the troops and cargo the last leg into Afghanistan.

Getting to Afghanistan and back is not a routine flight by any means. Missions from Germany can last 26 hours. Plus, aircrews must fly into a part of the world with some of the most rugged mountains. It is an area full of threats to aircraft. And once there, aircraft must land at short and unfamiliar airfields. So it takes a focused crew, officials said.

On the ground, things are tense as ground crews quickly unload their precious cargoes.

Aircraft spend as little time on the ground as possible, said Capt. Jeff Nelson, a C-17 pilot, who is deployed from the 17th Airlift Squadron at Charleston Air Force Base in South Carolina.

"When we land, we sit with our engines running and brakes on," Nelson said. "And we wait for the loadmaster to offload the cargo."

It is a stressful time that can seem like forever, he said. But though they know they are in a threat area and want to get out now, Nelson said there is no rushing.

"We don't want to cut any corners," he said. "So we let the loadmaster do his job."

But once cleared to go, the cargo planes make a hasty, tactical departure for friendly skies.

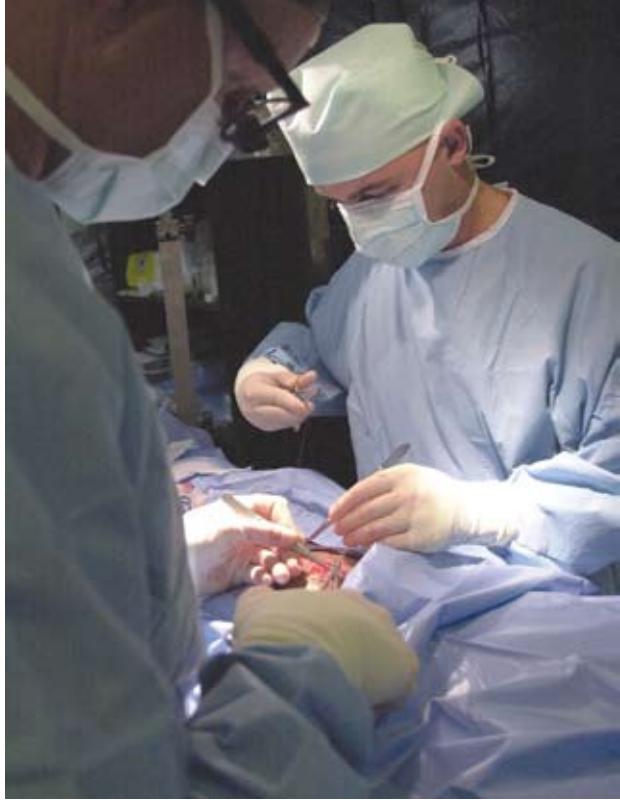
Planes that fly from here make the round trip without refueling. Those flying back to Germany usually stop in a neighboring country to refuel before heading home.

As if the C-17 is not busy enough, it is also acting as a tanker of sorts, De Paolo said. Some of the later versions of the aircraft have larger fuel tanks. That allows C-17s flying from here to offload aviation fuel in Afghanistan.

De Paolo said the missions into Afghanistan are not as frequent or robust as the C-17 missions flown during Kosovo, but the aircrews are just as enthusiastic to get the job done. And the airplane is holding up under the around-the-clock flying.

"The C-17s are doing an outstanding job here," DePaolo said. ■

Air Force Pitches Tent Tests Technology at Detrick



by karen fleming-michael
fort detrick standard staff writer

With wind gusts rippling the tent's ceiling and walls and amid a generator's pervading din, experts strain to hear a contractor explain how his company's oxygen generation machine works.

Although it doesn't sound like an ideal setting for a product demonstration, U.S. Air Force Lt. Col. Steve Bell, chief of the Air Force Medical Evaluation Support Activity, says the Expeditionary Medical Support System tent is the perfect place for it.

Open for business at Fort Detrick, Md., since Oct. 23, 2001, the desert tan-color tent, called the EMEDS-XTI, serves as a test bed for experiments, exercises and technology insertions to help Air Force members working in similar structures worldwide.

The lightweight, rugged tents are 20 feet wide by 32 feet long and deploy to create expanding hospitals. Much like Lego building blocks, the mission-specific tents "modularly increase as the intensity or length of the conflict endures," Bell said.

The first tent, which can be in place in 24 hours, is the Small Portable Expeditionary Aeromedical Rapid Response module, which is an emergency room and patient administration area. Successive tents follow in order and include an operating room with dental suite; administrative suite with communications equipment; laboratory, x-ray and pharmacy tent; intensive care unit; and if needed, patient ward room.

Having the tent will go a long way in serving the Air Force's deployable medicine needs.

"We have exactly what they [Air Force medics] are using to deploy for the Expeditionary Air Force," Bell said. "So we also have embedded in here the ability to look at technology and say 'I think we can do a better job' with any of the equipment."

The oxygen generation equipment demonstration illustrates the tent's ability to serve as a test bed for new equipment.

"You can change and introduce technologies ... in an environment where it would operate to see if it's usable," Bell said. Once a technology is introduced, experts can work on site to confirm the system's form, fit and function are acceptable and then can write procedures on using it.

The final step in the technology insertion process, Bell said, is end users trying it out. Medical warfighters can be trained on the equipment at Fort Detrick then give their opinions.

"We will leave it up to the users to make an assessment," said U.S. Air Force Lt. Col. Jim Sylvester, chief of aeromedical evacuations programs.

"If the user is telling us this is the one that works best, it will be the right decision," Bell said. "What we want to avoid is making hasty decisions so the user doesn't get enough time to become familiar with it, and when it shows up in a deployed environment, no one knows how to use it."

Once users evaluate the product, Bell's data collection team generates a report and passes it to the Air Force Surgeon General's staff to help them in making procurement decisions.

The tent's availability permits Expeditionary Medical Support teams to exercise in a structure they're familiar with.

"To have a medical facility at an exercise in the past, we've had to beg, borrow or steal one," Bell said. He and his six-person staff fully expect to break down the tent and take it to exercises as often as needed.

Information on useful technologies won't stay solely in Air Force channels, Bell said.

"When we're inserting technologies that the Air Force is interested in, I would expect the Army would be interested in what we're doing, so cross-communication will be a big player," he said.

Interoperability issues will be at the forefront of the Air Force-Army discussions.

"If everybody were trained and working on the same kinds of systems or equipment, that interoperability from a joint perspective is very important. For example, with communication and LANs [local area networks], it would be nice if they all talk to each other."

The tent's back-door neighbor is the Forward Deployable Digital Medical Treatment Facility, which is being developed by the U.S. Army Medical Research and Materiel Command's Telemedicine and Advanced Technology Research Center.

"One of the early ideas we had with the FDDMTF [Forward Deployable Digital Medical Treatment Facility] was getting an EMEDS in here so they could see what the Air Force has as a baseline," Bell said.

The joint partnership will help the

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Experts Use Modern Medicine, High-Tech Tools to Serve Patients Worldwide

by journalist 2nd class ellen maurer
national naval medical center public affairs

Inside the high-tech, high-security world of National Naval Medical Center's Bethesda telemedicine control center, members of the telemedicine team are using modern technology to link National Naval Medical Center Bethesda health care providers with sailors deployed to distant locations around the world. Experts in both health care and computer technology are working together, using a combination of wired and wireless technologies, to leverage time and distance.

These devices range from the traditional fax machine, telephone and Internet e-mail, to cutting-edge technologies such as real-time video teleconferencing and wireless messaging devices — all integrated to give non-local patients access to National Naval Medical Center care.

"Telemedicine allows NNMC [National Naval Medical Center] to keep up with the evolution of health care and the command's mission of supporting Navy force health protection," said Mike Azar, telemedicine department head.

"Before we had this type of technology, a ship's general medical officer had sole responsibility for initial X-ray interpretations. Often, the second opinion didn't come until the end of the deployment," explains U.S. Navy Lt. David Felton, Nurse Corps, service chief for e-Health at the National Naval Medical Center. "Now, using a hybrid of technologies, including a teleradiology program called RADWORKS, which is basically radiology through telemedicine, independent-duty corpsmen and medical officers in the fleet can communicate directly with specialists back here at NNMC in real-time, while the X-rays are interpreted simultaneously."

"Telemedicine allows NNMC to keep up with the evolution of health care ... "

Aboard the deployed amphibious assault ship USS Bataan (LHD 1), homeported in Norfolk, Va., and now serving in support of Operation Enduring Freedom, the ship's medical staff relies heavily on tele-medicine's capabilities — using it to instantly connect with experts at National Naval Medical Center.

Most recently, during a mass-casualty situation involving nine critically wounded Afghani soldiers who were evacuated to the ship, Bataan's corpsmen virtually worked side-by-side, using RADWORKS and voice communications, with specialists back at National Naval Medical Center to treat their foreign patients.

"As an independent duty radiographer at sea, it makes me feel better knowing that the radiologist is just a click away," said Bataan Hospital Corpsman 2nd Class (SW) Sean Dover.

Since the hospital started using telemedicine in the mid-1990s, Felton says the program has grown to include not just tele-radiology, but also teleorthopedics, teleophthalmology, teledermatology, telemental health, telegenetics and telepathology. He said the prefix "tele," which means distant or remote, can be added to just about any clinical service; it really shows how National Naval Medical Center is using technology to further their resources and benefit patients at other medical facilities and

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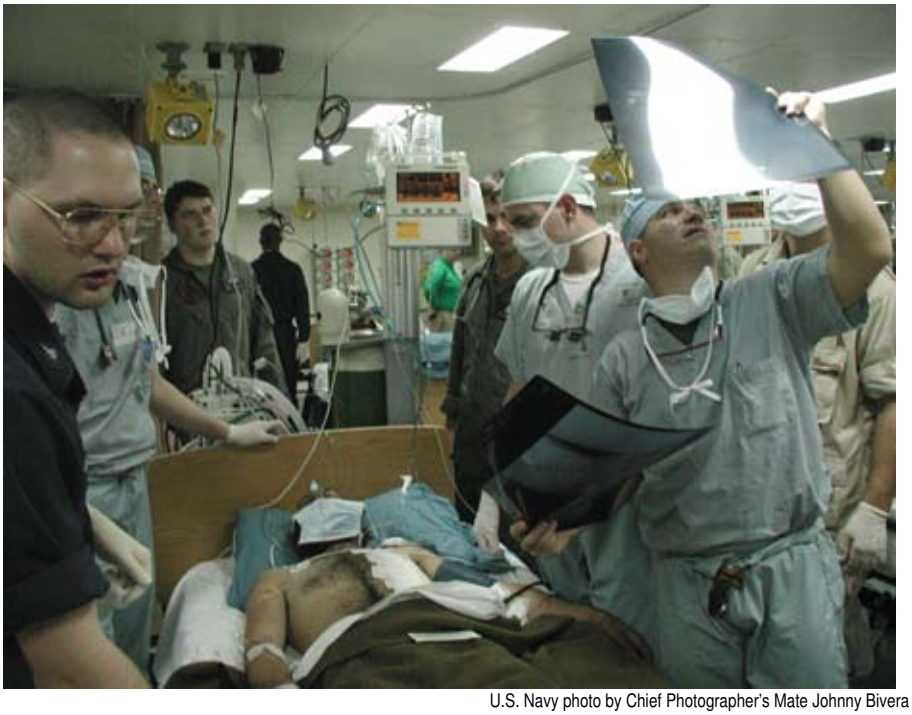

U.S. Navy photo by Chief Photographer's Mate Johnny Bivera

Medical personnel aboard the amphibious assault ship USS Bataan (LHD 5) treat wounded Pashtun soldiers from Afghanistan.

New Committee

— *Continued from Page 9*

plans and research strategies relating to the health consequences of military service in the Southwest Asia theater of operations during the Persian Gulf War."

Although the panel will not conduct research, its charter instructs the committee to review "all relevant research, investigations, and processes" done in the past to assess methods, results and implications for future research. The committee will also review proposed federal research plans, initiatives, procurements, grant programs and other activities regarding Gulf War-associated illnesses.

The committee will be led by James H. Binns Jr., a Vietnam veteran, former principal deputy assistant secretary of defense, and chairman of the board of Parallel Design, Inc., of Tempe, Ariz., acquired by General Electric in December 2000.

The advisory committee will be assisted by an expert panel of scientists and subject matter authorities who will add additional expertise, functioning as an auxiliary that reviews committee findings and provides expert guidance to the committee and the secretary. ■

Membership of Research Advisory Committee on Gulf War Veterans' Illnesses And Expert Panel

The Advisory Committee:

- **James H. Binns Jr.**, Chairman
- **Nicola Cherry**, M.D., Professor of Public Health Sciences at the University of Alberta, Canada
- **Beatrice Golomb**, M.D., assistant professor of medicine at the University of California at San Diego
- **Robert Haley**, M.D., chief of the epidemiology division of the University of Texas Southwestern Medical Center in Dallas
- **Marguerite Knox**, nurse practitioner Hopkins, S.C.
- **William J. Meggs,** M.D., chief of the division of toxicology of the East Carolina University School of Medicine
- **Jack Melling**, Ph.D., director of the Karl Landsteiner Institute for Vaccine Development in Vienna, Austria
- **Pierre Pellier**, M.D., vice president, neurosciences, global medical affairs, with GlaxoSmithKline, Inc.
- **Lea Steele**, Ph.D., senior health researcher with Kansas Health Institute and former epidemiologist with the U.S. Centers for Disease Control and Prevention
- **Joel C. Graves**, an Army Gulf War veteran from Washington
- **Stephen L. Robinson**, executive director of the National Gulf War Resources Center; Silver Spring, Md.
- **Steve Smithson**, assistant director of the Gulf War Task Force for the American Legion, Indianapolis, Ind.

The Expert Panel

- **Ira B. Black**, M.D., chairman, department of neuroscience and cell biology at the Robert Wood Johnson Medical School, Piscataway, N.J.
- **Joseph T. Coyle**, M.D., Eben S. Draper professor of psychiatry and neuroscience, Harvard Medical School, Belmont, Mass.
- **Floyd E. Bloom**, M.D., chair, department of neuropharmacology, Scripps Research Institute, La Jolla, Calif.
- **Eugene Johnson**, M.D., professor, department of neurology, Washington University, St. Louis, Mo.
- **Marsel Mesulam**, M.D., director, The Cognitative Neurology and Alzheimer's Disease Center, Northwestern University Medical School, Chicago
- **James J. Tuite, III**, chief operating officer, Chronix Biomedical, Inc., Benicia, Calif.
- **Bailus Walker, Jr.**, M.D., professor of environmental and occupational medicine, Howard University, Washington, D.C.

Air Force

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Army and Air Force look at future deployable hospitals.

"When they [the Army] get to the point where they have the equipment, we can reconfigure and try different things and move patients through here exercising the Forward Deployable Digital Medical Treatment Facility initiative. TATRC is really counting on the XTI piece to be a part of that," said Bell.

Since the tent went up only a few weeks ago, with "tremendous" help from U.S. Army Garrison communications staff and the 6th Medical Logistics Management Center, Bell said calls have been pouring in about using XTI as a venue for looking at different technologies.

"That's good, it's why we're here," he said.

According to the Telemedicine and Advanced Technology Research Center's Dr. Gary Gilbert, the EMEDS-XTI is the Air Force's contribution to the U.S. Army Medical Research and Materiel Command's effort to field a rapidly deployable hospital. The command has taken the lead for the Army in prototyping a lightweight, 44-bed, rapidly configurable and deployable hospital. The hospital will fit mission needs including natural disasters, homeland defense, humanitarian and peacekeeping missions, as well as future combat scenarios.

The EMEDS-XTI partnership with the U.S. Army Medical Research and Materiel Command, and its location at Fort Detrick, provide the Air Force with vital access to emerging technologies that would otherwise be unavailable to them, Gilbert said. Telemedicine and Advanced Technology Research Center is leading a multi-agency effort to develop and integrate tactical wireless communications and information systems for the deployable hospital and to ensure the system will be configured for effective tactical ground mobility. The Joint Army/Air Force Forward Deployable Digital Medical Treatment Facility prototype configuration should be complete by March 2002.

The austere conditions don't bother Bell and his staff.

"Medics who are deployed work in these things in conditions that are much more austere than this," Bell said. "From that perspective it reinforces, at least to me, why what we're doing is important. There are needs for rapid fielding of technologies that will get out to the folks in the field who in turn help the guys who are in the heat of the fire." ■

Navy Medics Go Digital

Figuring there had to be a better way of keeping track of available beds, medical equipment and blood supplies in the field, rather than depending on information relayed by phone and then scribbled on a white board with a grease pencil, the Office of Naval Research has come up with an answer — NavMedWatch. It is a computer network that will illuminate all the available medical resources in one visual map display.

"This tool will allow us to view what is going on across a region, react to current scenarios and conduct reactive planning to support current and future operations," said U.S. Navy Capt. Michael Sashin, head of Medical Plans and Policy for the Chief of Naval Operations.

The map display will track trends in injuries and diseases in an area, allowing medical facilities to better manage their resources and contain contagious diseases by juxtaposing data from a medical database with a medical facility and its available beds, staff, blood, supplies and equipment. The system will also provide alerts to patients in need of transportation to another medical facility.

"NavMedWatch allows you to pull the information out, organize it and put it in a display so you can see all your medical assets with one tool," said U.S. Navy Cmdr. Stephen Ahlers, Office of Naval Research program manager for the project.

Even though NavMedWatch is still in the testing phase, the next version offering even more information is in the works by ScenPro Inc. of Richardson, Texas, under a Small Business Innovation Research program contract. The new version will be able to anticipate the needs of future arrivals so supplies such as blood will be on hand — avoiding shortfalls. It will also be equipped with a history function, so the medical care of even one person can be tracked throughout the Naval medical care system. ■

High Tech Tools

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in the fleet.

Currently, there are 12 areas within the hospital that have video teleconferencing capabilities. Felton said the equipment is costly but, in the long run, the Navy saves money because telemedicine reduces travel and consultation costs while enhancing support and professional development. In fact, the speed with which second-opinion services can be provided to deployed units has already saved the fleet an enormous amount of money through medical evacuation cost-avoidance and by minimizing lost workdays.

"It's not only important, it's critical."

In the near future, National Naval Medical Center e-Health services will come online with new technologies that bridge together these video teleconferencing capabilities to further leverage time for clinicians consulting with the fleet. The telemedicine control center is also closely linked to National Naval Medical Center's communications center for purposes of providing secure and redundant methods of communication to fleet and operational units.

While telemedicine is spreading to more and more locations around the fleet, its use is also expanding in places closer to home, like Walter Reed Army Medical Center.

Pathologists at both Walter Reed and National Naval Medical Center now use telemedicine to conduct educational seminars over the Internet and by telephone between the two hospitals at least twice a week, according to National Naval Medical Center's Laboratory Service Line team leader U.S. Navy Cmdr. Robert Heaton, Medical Corps. Telemedicine not only furthers patient care and access to medical experts, it also fosters distance learning and health care provider education.

"It's not only important, it's critical," says Heaton. "In fact, a constant theme with our pathology residents are those academic conferences, because we need them to help train the residents so we can maintain continuity in training for all pathologists."

Heaton adds that continuity of training ensures continuity of care and the true benefit is geared toward better treatment for patients. Telemedicine offers patients more expert opinions, a variety of treatment choices and greater access to the best specialists. These are all reasons why the telemedicine staff understands it's a full-time commitment, on top of their normal duty hours and workload at National Naval Medical Center.

The telemedicine staff members carry wireless messaging devices, so that they can be in constant contact with the fleet 24 hours a day, seven days a week. These devices allow them to receive and answer pages and e-mails at all times, which is handy; but it also comes with serious responsibilities.

Requirements dictate that regardless of location or the time of day, the telemedicine staff members and medical experts must be available and ready to assist if called upon. Many times, given the fact that they are communicating with people in distant locations, like aboard Bataan, calls to duty come late into the night.

However, given the nature of National Naval Medical Center's mission of supporting and caring for those around the fleet, as well as those here at home, the on-call staff feel their sacrifices are worth it.

As a "behind-the-scenes" look at telemedicine shows, it's assignment may be a secure one, but the impact it has on military medicine and those who go into harm's way around the world is obvious and unwavering. ■

RESOURCE guide

Air Force Association
1501 Lee Highway
Arlington, VA 22209-1198
Phone: (800) 727 - 3337
http://www.afa.org

American Legion
1608 K St., NW
Washington, DC 20006
Phone: (202) 861 - 2700
http://www.legion.org

American Red Cross
17th & D Streets, NW
Washington, DC 20006
Phone: (202) 639 - 3520
http://www.redcross.org

AMVETS
4647 Forbes Blvd.
Lanham, MD 20706
Phone: (877) 726 - 8387
http://www.amvets.org

Association of the U.S. Army
2425 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 336 - 4570
http://www.ausa.org

Department of Veterans Affairs
810 Vermont Ave, NW
Washington, DC 20400
Phone: (202) 273 - 4300
http://www.va.gov

Disabled American Veterans
807 Maine St., SW
Washington, DC 20024
Phone: (202) 554 - 3501
http://www.dav.org

Enlisted Association of the National Guard
1219 Prince St.
Alexandria, VA 22314
Phone: (800) 234 - 3264
http://www.eangus.org

Fleet Reserve Association
125 N. West St.
Alexandria, VA 22314-2754
Phone: (703) 683 - 1400
http://www.fra.org

Marine Corps Association
715 Broadway Street
Quantico, VA 22134
Phone: (866) 622 - 1775
http://www.mca-marines.org

Marine Corps League
8626 Lee Highway, #201
Merrifield, VA 22031
Phone: (800) 625 - 1775
http://www.mcleague.org

National Association for Uniformed Services
5535 Hempstead Way
Springfield, VA 22151
Phone: (800) 842 - 3451
http://www.naus.org

National Committee for Employer Support of the Guard and Reserve
1555 Wilson Boulevard, Suite 200
Arlington, VA 22209-2405
Phone: (800) 336 - 4590
http://www.esgr.org

National Guard Association of the United States
1 Massachusetts Ave., NW
Washington, DC 20001
Phone: (202) 789 - 0031
http://www.ngaus.org

Naval Reserve Association
1619 King St.
Alexandria, VA 22314-2793
Phone: (703) 548 - 5800
http://www.navy-reserve.org

Navy League
2300 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 356 - 5760
http://www.navyleague.org

Non Commissioned Officers Association
225 N. Washington St.
Alexandria, VA 22314
Phone: (703) 549 - 0311
http://www.ncoausa.org

Reserve Officers Association
1 Constitution Ave., NE
Washington, DC 20002
Phone: (800) 809 - 9448
http://www.roa.org

Retired Officers Association
201 N. Washington St.
Alexandria, VA 22314
Phone: (800) 245 - 8762
http://www.troa.org

Veterans of Foreign Wars
200 Maryland Ave., NE
Washington, DC 20002
Phone: (202) 543 - 2239
http://www.vfw.org

Vietnam Veterans of America
8605 Cameron Street, Suite 400
Silver Spring, MD 20910-3710
Phone: (301) 585 - 4000
http://www.vva.org

MORE information

BY PHONE

Direct Hotline for Servicemembers, Veterans and Families
(800) 497 - 6261

Department of Veterans Affairs
(800) 827 - 1000

VA Persian Gulf War Registry
(800) 749 - 8387

VA Benefits and Services
(877) 222 - VETS

TRICARE Information
(800) TRICARE

ON THE WEB

Department of Defense
http://www.defenselink.mil

Department of Veterans Affairs
http://www.va.gov/

DeploymentLINK
http://www.deploymentlink.mil

GulfLINK
http://www.gulflink.osd.mil

TRICARE
http://www.tricare.osd.mil/